

REMARKS

Claims 9, 11-16, 19-21, 33, 34, 36-42, 44-48, and 50 are pending in the present application. In the Office Action dated June 28, 2006 (the "Office Action"), the Examiner rejected claims 1, 4-9, 11-16, 18-22, 25-27, 33, 34, 36-42, 44-48, and 50 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Nos. 6,256,692 to Yoda et al ("Yoda"), 6,098,158 to Lay et al. ("Lay"), and 5,818,182 to Viswanadham et al. ("Viswanadham").

The Examiner maintains the rejection of the claims as set forth in a previous office action mailed December 23, 2005. Applicants' arguments set forth in the response to office action submitted April 14, 2006, addressing the Examiner's claim rejections of the previous office action, are maintained by Applicants. The remarks in the present response supplement Applicants' previous arguments.

Lay describes a process for storing a boot image to non-volatile memory that is used to restore operation of a computer system in the event an unexpected interruption to normal operation occurs. Examples of such events described in Lay include power failure or interruption and system operation failure. See col. 3, lines 2-5. Lay describes the boot image as being saved to "disk storage." Figure 1 illustrates an example of disk storage, represented by external device 16a. See col. 3, lines 49-51. In one embodiment, the invention of Lay is described as being implemented "in whole or in part in or across a distributed computing environment." See col. 4, lines 18-20. The system and process described in Lay can be used for a "mission critical enterprise environment," see col. 4, lines 8, suggesting that implementation of the process can be used to prevent unrecoverable catastrophic system failure. Boot images for a computer system are continuously created so that upon restoration of the computer system, if necessary, one particular boot image can be used over another if it is easier or faster for the system to be restored.

The description in Lay suggests the need for a disk storage to be accessible at all times while the computer system is operating. For example, the Lay system is geared toward restoring a computer system to a previous operating state in the event an unexpected event occurs, such as a power outage or other system failure or interruption. By the nature of an unexpected event, it is impossible to predict when one will occur. As a result, Lay teaches continuously creating boot images for the computer system. In order for continuously created

boot images to be stored, disk storage should be continuously accessible. Otherwise, it would defeat the purpose of creating multiple boot images for the computer system in the first place.

In contrast to Lay, the invention described in the present application includes embodiments that store machine state information in a removable and transportable storage medium, such as a PC card having non-volatile memory. Using a PC card allows for a machine state captured for one computer system to be transferred to another computer system and used to restore the machine state of the first computer at the second computer. The benefits of storing machines states in a removable and transportable storage medium is portability of multiple computer system environments. Having such a removable storage medium is contrary to the teachings of Lay in that the storage medium to which boot images are stored may be present or not. As previously discussed, ensuring recoverability of a computer system according to Lay requires that boot images are stored and accessible continuously, which is not necessarily the case for a removable storage medium.

As a result, it is unlikely that one ordinarily skilled in the art would be motivated to modify the teachings of Lay to use a removable and portable non-volatile memory (such as a PC card) to store boot images, as suggested by the Examiner. Thus, the Examiner's obviousness rejection based on modifying the teachings of Lay by the teachings of Viswanadham, which has been cited by the Examiner as teaching a PCMCIA card having non-volatile memory, cannot be maintained for failing to establish sufficient motivation to combine the cited references, and consequently, should be withdrawn.

Moreover, in other embodiments of the present invention, multiple machine states can be stored on the PC card. As a result, multiple machine states can be transported from one machine to another, and a computer system can be restored to the machine state of one of several different computer systems. Whereas Lay describes creating and storing multiple boot images for a computer system, the currently claimed inventions use a PC card to store machine state information corresponding to the machines states of multiple computer systems. For example, claim 9 recites a computer system that includes a PC card having non-volatile memory having stored thereon machine state information for a plurality of different computer systems. Similar limitations are recited in claims 16, 33, and 38. Claim 45 recites a method for restoring a machine state to a computer system that includes capturing the machine state for a plurality of computer systems in a PC card, identifying machine state information on the PC card that is to be

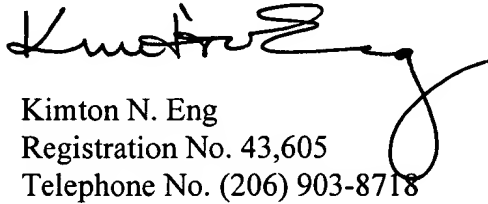
used to restore a computer system, and transferring machine state information to the computer system.

As previously discussed, the system and process described in Lay is directed to restoring a computer system to a previous operating state in the event of a power outage, system failure, or other similar unexpected event occurs. Unlike the claimed inventions, Lay teaches creating and storing on disk storage boot images for one computer system, and does not teach or suggest storing machines states for a plurality of different computer systems. Additionally, Lay fails to teach or suggest capturing machine states for a plurality of computer systems and using one of the captured machine states to restore another computer system to that machine state. Rather than suggesting any desirability for storing machine states for multiple different computer systems, as recited in the pending claims, Lay teaches that it is desirable to continuously create and store boot images for a single computer system having a mission critical application, such as in hospital emergency rooms, in order to facilitate a “fast boot” process and quickly restore the computer system to a previous operable state. Neither the Yoda or Viswanadham references make up for the deficiencies of the Lay reference, as previously discussed.

For the foregoing reasons, the combined teachings of the Yoda, Lay, and Viswanadham references fail to teach or suggest the combination of limitations recited by claims 9, 16, 33, 38, and 45. Claims 11-15, which depend from claim 9, claims 19-21, which depend from claim 16, claims 34, 36, and 37, which depend from claim 33, claims 39-42 and 44, which depend from claim 38, and claims 46-48 and 50, which depend from claim 45, are also patentable based on their dependency from a respective allowable base claim, as well as the additional recited limitations. Therefore, the Examiner’s rejection of claims 9, 11-16, 19-21, 33, 34, 36-48, and 50 under 35 U.S.C. 103(a) should be withdrawn.

All of the claims pending in the present application are in condition for allowance.
Favorable consideration and a Notice of Allowance are earnestly solicited.

Respectfully submitted,
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